

PARENT CONSENT FORM

STUDY TITLE: Controlled DTI evaluations in High School Football and Female Soccer to evaluate efficacy of jugular compression collar

STUDY NUMBER: 2018-1123

FUNDING ORGANIZATION: Q30 Sports Science, LLC

Gregory D. Myer, PhD
Name of Principal Investigator

(513) 803-1636 Telephone Number

INTRODUCTION

We are asking your child (and up to about 499 other people) to be in a research study so that we can learn new information that may help others. If you decide not to be in this study, we will still take good care of your child. If you decide to be in this study, you may change your mind at any time during the study and your child can stop being in the study. Take all the time you need to make your choice. Ask us any questions you have. It is also okay to ask more questions after you decide to be in the study. You can ask questions at any time.

WHY ARE WE DOING THIS RESEARCH?

In this research study we want to learn more about a new device (see Figure below), which may help prevent brain injury. The neck collar device is made of plastic over a gentle embedded "spring" that is fitted around the neck providing comfortable compression to two of the veins on the side of the neck.

In other studies we are testing the theory that this mild compression will help reduce brain injury by back-filling the empty space around the brain with some blood and thereby acting like "bubble wrap" around it. It has been suggested that many "head banging animals" may be using a similar protection in the wild.

In addition we wish to learn more about how the brain responds to impacts during sport.



We are asking your child and other people like your child who play contact sports like football and female soccer to be in the research, because we want to learn more about how the device works.



WHO IS IN CHARGE OF THE RESEARCH?

Greg Myer, PhD is the researcher at Cincinnati Children's Hospital Medical Center (CCHMC) that is in charge of this study. CCHMC is being paid by Q30 Labs, LLC to do this study.

WHO SHOULD NOT BE IN THE STUDY

Your child can not be in this study if he/she have any of the following:

- History of neurological deficits or severe head trauma
- Known increased intracerebral pressure, metabolic acidosis or alkalosis
- Any known increased pressure in eyes
- any known increased fluid on the brain
- Recent penetrating brain trauma (within 6 months)
- Known increased pressure in the brain
- Any known blood clots to the brain
- Any known airway obstruction

WHAT WILL HAPPEN IN THE STUDY?

The research staff will explain each visit to you and your child and may give you a handout that explains each visit in more detail. You will be able to ask questions to make sure that you understand what will happen.

If you qualify and decide you want your child to be in the study, your child will come to CCHMC at least 2 times over the next 6 months.

<u>Group Assignment:</u> Your child will be assigned to one of two groups at the beginning of the season 1) Subjects wearing the device (seen in Figure on page 1) around the neck or 2) Subjects not wearing the device. Both groups will complete the same testing as all participants in the study. To ensure proper fitting of the collar, ultrasound may be utilized. This fitting visit will be completed at the school before the first official practice. The study coordinator will visit the team weekly to monitor the use of the collar. The school athletic trainer will be there daily to ensure proper use and compliance.

If your child is assigned to the device-wearing group, we will measure the circumference of your child's neck with a measuring tape. We will then fit your child with the correct sized collar. Your child will wear the device during practices and games that will fit around your neck which will place light pressure on your neck. While most do not find this uncomfortable, the pressure on your child's neck will feel like wearing a necktie. The neck collar device is made of plastic over a gentle embedded "spring" that is fitted around the neck providing comfortable compression to two of the veins on the side of the neck. Studies have shown that there is no significant change in blood flow pattern or oxygen uptake pattern or any negative cognitive effect to the brain (even with prolonged similar physiology of wearing of a tight necktie) and therefore the risk of wearing this device is low. It has also been tested during high intensity exercise and has shown no effect on performance, and has



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been deemed safe.

This device is ONLY to be used during the football/soccer team games and practices. This device will NOT go home with the athlete. Following the competitive season/end of study participation, the collar study device will be returned to the study coordinator. No participant will be allowed to keep the study device once study participation has concluded.

These are the things that may happen to your child while in the study:

- 1. Neck Circumference, Height, Weight, and Body Fat % Measurements: We will measure the circumference of your child's neck with a measuring tape. We will also measure your child's height, weight, and body fat percentage using a standard measuring stick for height and a scale for weight and body fat percentage. This will be completed once at pre-season and once at post-season.
- 2. <u>ADHD Screening</u>: Parents and study participants may complete a brief behavioral rating scale that assesses symptoms of ADHD via a REDCap online survey to be completed prior to the MRI scanning session. Parents that do not attend the MRI session with the research participant will be sent a link via email for them to complete this questionnaire. This questionnaire will take no longer than 5-10 minutes to complete. This will be completed at both the pre and post-season appointments and post-concussion.
- 3. <u>PCSI</u>: Parents and study participants will complete the Post Concussion Symptom Inventory (PCSI) form at the MRI screening session at both pre and post-season and post-concussion.
- 4. Concussion and Sport Exposure History: Parents and study participants may complete a brief REDCap survey to collect the participant's history of concussion injury as well as previous exposure to contact or collision sports. This online survey will be completed prior to the MRI scanning session. Parents that do not attend the MRI session with the research participant will be sent a link via email for them to complete this questionnaire. This questionnaire will take no longer than 5-10 minutes to complete. This will be completed at both the pre-season appointment.
- <u>MRI Imaging:</u> Your child will be asked to lie down in a machine that will take images of your child's brain. For part of this test, your child may be asked to lay still. For other parts of this test, your child may be asked to answer questions that will assess his/her thinking and memory. Your child will be asked to have an MRI at two time points. The first test will be completed at the pre-season and the second at a post-season time point. The MRI testing will take approximately 60 minutes to complete. Prior to the imaging appointment, you will be asked to complete a screening questionnaire to ensure that your child does not have any contraindications (reasons why an MRI cannot be performed) to this type of scan. If any contraindications are revealed (i.e. permanent metal dental/orthodontic work, cochlear implant, cardiac pacemakers, orthopedic pins/screws/plates, etc.) your child will not complete the MRI imaging portion of this study. This will not affect your participation in the remaining parts of this project.
- 6. Functional Visual Assessment (VEP): VEP is a method to assess the relative time between a flash in the eye until it is received in the back of the brain. The system uses a hand held device (held by the researcher) that flashes light in one eye at a time and measures the responses. Three electrodes will be placed on the scalp and an eye patch will be alternately placed over each eye.
- 7. Timed reading test of letters from alternating sides. The subject will read letters on alternating



- columns running down a sheet of paper. The researcher will time this test (in seconds) and the test is completed once the subject finishes reading all of the letters.
- 8. Cognitive testing: The subject will perform several tests on a tablet including matching symbols (cued task switching), trail making where you will draw lines to numbered circles so they are in numeric order, and a reaction task where you will push an arrow that corresponds to an image displayed (flanker test).
- 9. Near Point Convergence Test: A small padded device will be held on the bridge of your child's nose and your child will tell the investigator when an image on a card becomes blurry.
- <u>10. King-Devick Test</u>: This is a two-minute test where you will read aloud single digit numbers separated by lines and arrows. This test will be performed twice.
- 11. Postural Sway Task: Your child will be asked to stand upright on a force platform. The force platform is a noninvasive device that measures the ground reaction forces produced during upright stance. Your child will be asked to stand comfortably with arms at the side for a minute for two trials. Once with the eyes open and once with the eyes closed.
- <u>12</u>. <u>Accelerometers:</u> An accelerometer is a device that measures how fast something is moving and will collect information on the collisions that happen while playing sports. An accelerometer is a very small device that will not affect your child's play.
- 13. Injury tracking: We will be monitoring your injuries throughout the competitive sports season and collecting information about your injuries from the athletic trainer.

WHAT ARE THE GOOD THINGS THAT CAN HAPPEN FROM THIS RESEARCH?

Being in this study may not help you right now. When we finish the study, we hope that we will know more about this device. This may help us prevent brain injury later on. We do not currently know if this device will protect you from suffering a concussion injury. Therefore, throughout the duration of this study you should continue to wear all normally worn protective equipment and continue to follow the safety measures put into place about how to hit, block and play the sport in a safe manner.

WHAT ARE THE BAD THINGS THAT CAN HAPPEN FROM THIS RESEARCH?

There are no known risks of wearing the device.

Wearing this device does not allow your child to adjust the safety measures put into place about how to hit, block, and play the sport in a safe manner. Your child should wear all normally worn protective equipment.

There are no known negative effects from exposure to the magnet or radio waves used in the MRI at this time; however it is possible that harmful effects could be recognized in the future. The tight space of the MRI may make some people feel uncomfortable. One known risk is that the magnet can attract certain kinds of metal. Therefore, we will have all subjects complete a pre-MRI screening questionnaire. If there is any indication from this questionnaire that the MRI is not safe you will not have the MRI testing. The MRI testing will require you to lie on your back and remain still for the duration of the test, which could last about 60 minutes. Due to the nature of the test, there will be a loud knocking noise that you will hear while the test is being performed. Your child will be instructed



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that if at any point during the test, he/she can signal to the research staff to stop the test if he/she get too uncomfortable.

There is also a minimal risk that the data collected may be viewed by individuals outside the research team. The risk that confidential data may be viewed is relevant for both the written forms and the electronic databases.

There may be other risks that we do not know about yet.

WHAT OTHER CHOICES ARE THERE?

Instead of being in this study, your child can choose not to be in it. Participating in this research is completely voluntary. Your child will not be punished if you decide not to participate.

HOW WILL INFORMATION ABOUT YOU BE KEPT PRIVATE?

Making sure that information about your child remains private is important to us. To protect your privacy in this research study we will: keep the results of this study confidential. No subject identification will be made public record in any form unless you give your expressed written permission of release of your name, photograph or likeness captured on video. You have the right to privacy. We will protect your privacy to the extent allowed by law. All facts about this study that can describe a subject's name will be kept private. Results of the study will be summarized regarding age, etc., but we will take every precaution necessary to keep names private. All subject data will be blinded from the researchers with the use of an identification code. Personal information and identifiers will be securely recorded and filed by the administrative assistant. The data will be encrypted with a password and stored on a personal computer and backed up on a network drive. We will be available for any questions that might arise.

A description of this clinical trial will be available on http://www.ClinicalTrials.gov, as required by U.S. Law. This website will not include information that can identify you. At most, the website will include a summary of the study results. You can search this website at any time.

Because this research study involves payment for participation we are required by federal Internal Revenue Service (IRS) rules to collect and use your social security or tax ID number (SSN) in order to track the amount of money that we pay you. Unless you have given specific permission for another use of your SSN related to this research we will only use your SSN to keep track of how much money we pay you and your SSN will not be used as part of this research.

The Food and Drug Administration (FDA) may choose to inspect your records since you are a subject in this investigation of an unapproved device.

WHAT IF WE LEARN NEW INFORMATION DURING THE RESEARCH?



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The study doctor will tell you if they find out about new information from this or other studies that may affect your child's health, safety or willingness to stay in this study.

The MR imaging that your child is having as part of this research study will be reviewed by a qualified radiologist just as it would be if your child were having the MRI as part of his/her routine medical care. There is a possibility that while reviewing your child's MRI we may see an abnormality that we did not expect to see in this study. This is what is called an "incidental finding." We will let you know if we see such an incidental finding. Depending on the type of incidental finding, we may contact you by mail or by phone. If you want, we will give information about this incidental finding to your child's primary doctor or we will refer you to an appropriate doctor for further evaluation. The costs for any care that will be needed to diagnose or treat an incidental finding would not be paid for by this research study. These costs would be your responsibility.

WILL IT COST YOU ANYTHING EXTRA TO BE IN THE RESEARCH STUDY?

Participating in this study will not cost you anything other than time and effort. Your insurance will not be billed for any testing associated with this study.

WILL YOU BE PAID TO BE IN THIS RESEARCH STUDY?

Your child will be reimbursed for his/her time, effort and travel while you are in this research study.

Your child will receive payment for this study in the form of a reloadable debit card (Clincard). We will give you a handout that will explain how to use the card. Because your child is being paid for his/her participation, CCHMC is required by the Internal Revenue Service (IRS) to collect and use your social security number (SSN) or taxpayer identification number (TIN) to track the amount of money that we pay. You will need to complete a Federal W-9 form for this income tax reporting. This form requires your Social Security number. This form will be given to the CCHMC business office. It will not be kept as part of your study chart. If you move, you will need to complete another W-9 with an updated address.

Your child will be paid a \$50 Clincard Mastercard ® at the first study visit, and a \$100 Clincard Mastercard® for completing the second study visit. Participants who sustain a clinically diagnosed concussion will also receive \$50 for each completed session following new concussion diagnosis.

WHAT HAPPENS IF YOU ARE INJURED FROM BEING IN THIS STUDY?

This research does not require that the participant maintains participation in their sport. The desire to participate in the sporting event is an independent, personal decision separate from the decision to enter into this study. During the course of this study, we expect that injuries consistent with the sport being played will occur, such as head injuries, sprains, fractures, and muscle injuries. Some of these injuries may be severe and have severe consequences. **The choice to participate and accept the**



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risk of the participation in the sport you have chosen is a choice made by you. Neither the study investigator (Dr. Myer) nor CCHMC will be responsible for the medical treatment of any sport related injuries. While the likelihood of an injury related to this research is small, if you believe that you have been injured as a result of this research you should contact Gregory Myer, PhD as soon as possible to discuss the concerns. Treatment for injuries is available at CCHMC. If you go to the Emergency Room or to another hospital or doctor it is important that you tell them that you are in a research study. If possible, you should give them a copy of this consent form.

CCHMC follows a policy of making all decisions about compensation for the medical treatment of physical injuries that happened during or were caused by research on an individual basis.

WHO DO YOU CALL IF YOU HAVE QUESTIONS OR PROBLEMS?

For questions, concerns, or complaints about this research study you can contact the study person listed on page 1 of this document.

If you would like to talk to someone that is not part of the research staff or if you have general questions about your research study rights or questions, concerns, or complaints about the research, you can call the CCHMC Institutional Review Board at 513-636-8039.

WHAT ELSE SHOULD YOU KNOW ABOUT THE RESEARCH?

If your child is diagnosed with a concussion during participation in this study, your medical care will not be affected by your participation. While your insurance will not be billed for any testing associated with this study, any further care or treatment will be billed accordingly. By participating in this study you acknowledge that you are voluntarily wearing an experimental device and that the FDA has not approved the device for sale and, therefore, it is not available for purchase in the US.

This research does not require your child to participate in a sport. If your child does choose to participate in a sport during this study, you and he/she alone are responsible for following the rules, regulations, policies, procedures, and requirements relating to any sport or organization in which he/she participates, either as an individual or through his/her membership on a team. Similarly, you and he/she alone are responsible for complying with any contract that he/she may have with a sports team, league, association, or any other type of organization.

AUTHORIZATION FOR USE/DISCLOSURE OF HEALTH INFORMATION FOR RESEARCH

To be in this research study you must also give your permission (or authorization) to use and disclose (or share) your child's "protected health information" (called PHI for short).

What protected health information will be used and shared during this study? CCHMC will need to use and share your PHI as part of this study. This PHI will come from:

Your CCHMC medical records



Your research records

The types of information that will be used and shared from these records include:

- Laboratory test results, diagnosis, and medications
- Reports and notes from clinical and research observations
- Imaging (like CT scans, MRI scans, x-rays, etc.) studies and reports
- If applicable, information concerning HIV testing or the treatment of AIDS or AIDS-related conditions, drug or alcohol abuse, drug-related conditions, alcoholism, and/or psychiatric/psychological conditions (but not psychotherapy notes).

Who will share, receive and/or use your protected health information in this study?

- Staff at all the research study sites (including CCHMC)
- Personnel who provide services to you as part of this study
- Other individuals and organizations that need to use your PHI in connection with the research, including people at the sponsor and organizations that the sponsor may use to oversee or conduct the study.
- The members of the CCHMC Institutional Review Board and staff of the Office of Research Compliance and Regulatory Affairs.

How will you know that your PHI is not misused?

People that receive your PHI as part of the research are generally limited in how they can use your child's PHI. In addition, most people who receive your PHI are also required by federal privacy laws to protect your PHI. However, some people that may receive your child's PHI may not be required to protect it and may share the information with others without your permission, if permitted by the laws that apply to them.

Can you change your mind?

You may choose to withdraw your permission at any time. A withdrawal of your permission to use and share your child's PHI would also include a withdrawal from participation in the research study. If you wish to withdraw your permission to use and share PHI you need to notify the study doctor, listed on the first page of this document, in writing. Your request will be effective immediately and no new PHI about you will be used or shared. The only exceptions are (1) any use or sharing of PHI that has already occurred or was in process prior to you withdrawing your permission and (2) any use or sharing that is needed to maintain the integrity of the research.

Will this permission expire?

Your permission will expire at the end of the study. If the study involves the creation or maintenance of a research database repository, this authorization will not expire.

Will your other medical care be impacted?

By signing this document you are agree to participate in this research study and give permission to CCHMC to use and share your PHI for the purpose of this research study. If you refuse to sign this document you will not be able to participate in the study. However, your rights concerning treatment not related to this study, payment for services, enrollment in a health plan or eligibility of benefits will not be affected.

Signature of Parent/Legally Authorized

Representative*



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The research team has discussed this study with you and answered all of your questions. Like any research, the researchers cannot predict exactly what will happen. Once you have had enough time to consider whether you should participate in this research you will document your consent by signature below.

You will receive a copy of this signed document for your records.

Printed Name of Research Participant

Signature of Research Participant
Indicating Consent/Assent

* If signed by a legally authorized representative, a description of such representative's authority must be provided

Date

Signature of Individual Obtaining Consent Date



ADULT SUBJECT CONSENT FORM

STUDY TITLE: Controlled DTI evaluations in High School Football and Female Soccer to evaluate efficacy of jugular compression collar

STUDY NUMBER: 2018-1123

FUNDING ORGANIZATION: Q30 Sports Science, LLC

<u>Gregory D. Myer, PhD</u> Name of Principal Investigator

(513) 803-1636 Telephone Number

INTRODUCTION

We are asking you (and up to about 499 other people) to be in a research study so that we can learn new information that may help others. If you decide not to be in this study, we will still take good care of you. If you decide to be in this study, you may change your mind at any time during the study and you can stop being in the study. Take all the time you need to make your choice. Ask us any questions you have. It is also okay to ask more questions after you decide to be in the study. You can ask questions at any time.

WHY ARE WE DOING THIS RESEARCH?

In this research study we want to learn more about a new device, (see Figure below), which may help prevent brain injury. The neck collar device is made of plastic over a gentle embedded "spring" that is fitted around the neck providing comfortable compression to two of the veins on the side of the

neck. In other studies we are testing the theory that this mild compression will help reduce brain injury by back-filling the empty space around the brain with some blood and thereby acting like "bubble wrap" around it. It has been suggested that many "head banging animals" may be using a similar protection in the wild.

In addition we wish to learn more about how the brain responds to impacts during sport. We are asking you and other people like you who play contact sports like football and female soccer to be in the research, because we want to learn more about how the device works.





WHO IS IN CHARGE OF THE RESEARCH?

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WHO SHOULD NOT BE IN THE STUDY

You can not be in this study if you have any of the following:

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- Known increased intracerebral pressure, metabolic acidosis or alkalosis
- Any known increased pressure in eyes
- any known increased fluid on the brain
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WHAT WILL HAPPEN IN THE STUDY?

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If you qualify and decide you want to be in the study, you will come to CCHMC at least 2 times over the next 6 months.

<u>Group Assignment:</u> You will be assigned to one of two groups at the beginning of the season 1) Subjects wearing the device (seen in Figure on page 1) around the neck or 2) Subjects not wearing the device. Both groups will complete the same testing as all participants in the study. To ensure proper fitting of the collar, ultrasound will be utilized. This fitting visit will be completed at the school before the first official practice. The study coordinator will visit the team weekly to monitor the use of the collar. The school athletic trainer will be there daily to ensure proper use and compliance.

If you are assigned to the device-wearing group, we will measure the circumference of your neck with a measuring tape. We will then fit you with the correct sized collar. A subset of participants may undergo a quick ultrasound test to evaluate the collar fit. You will wear the device during your practices and games that will fit around your neck which will place light pressure on your neck. While most do not find this uncomfortable, the pressure on your neck will feel like wearing a necktie. The neck collar device is made of plastic over a gentle embedded "spring" that is fitted around the neck providing comfortable compression to two of the veins on the side of the neck. Studies have shown that there is no significant change in blood flow pattern or oxygen uptake pattern or any negative cognitive effect to the brain (even with prolonged similar physiology of wearing of a tight necktie) and therefore the risk of wearing this device is low. It has also been



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- 2. <u>ADHD Screening</u>: Study participants may complete a brief behavioral rating scale that assesses symptoms of ADHD via a REDCap online survey to be completed prior to the MRI scanning session. This questionnaire will take no longer than 5-10 minutes to complete. This will be completed at both the pre and post-season appointments and post-concussion.
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instructed that if at any point during the test, you can signal to the research staff to stop the test if you get too uncomfortable.

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Making sure that information about you remains private is important to us. To protect your privacy in this research study we will: keep the results of this study confidential. No subject identification will be made public record in any form unless you give your expressed written permission of release of your name, photograph or likeness captured on video. You have the right to privacy. We will protect your privacy to the extent allowed by law. All facts about this study that can describe a subject's name will be kept private. Results of the study will be summarized regarding age, etc., but we will take every precaution necessary to keep names private. All subject data will be blinded from the researchers with the use of an identification code. Personal information and identifiers will be securely recorded and filed by the administrative assistant. The data will be encrypted with a password and stored on a personal computer and backed up on a network drive. We will be available for any questions that might arise.

A description of this clinical trial will be available on http://www.ClinicalTrials.gov, as required by U.S. Law. This website will not include information that can identify you. At most, the website will include a summary of the study results. You can search this website at any time.

Because this research study involves payment for participation we are required by federal Internal Revenue Service (IRS) rules to collect and use your social security or tax ID number (SSN) in order to track the amount of money that we pay you. Unless you have given specific permission for another use of your SSN related to this research we will only use your SSN to keep track of how much money we pay you and your SSN will not be used as part of this research.

The Food and Drug Administration (FDA) may choose to inspect your records since you are a subject in this investigation of an unapproved device.

WHAT IF WE LEARN NEW INFORMATION DURING THE RESEARCH?



The study doctor will tell you if they find out about new information from this or other studies that may affect your health, safety or willingness to stay in this study.

The MR imaging that you are having as part of this research study will be reviewed by a qualified radiologist just as it would be if you were having the MRI as part of your routine medical care. There is a possibility that while reviewing your MRI we may see an abnormality that we did not expect to see in this study. This is what is called an "incidental finding." We will let you know if we see such an incidental finding. Depending on the type of incidental finding, we may contact you by mail or by phone. If you want, we will give information about this incidental finding to your primary doctor or we will refer you to an appropriate doctor for further evaluation. The costs for any care that will be needed to diagnose or treat an incidental finding would not be paid for by this research study. These costs would be your responsibility.

WILL IT COST YOU ANYTHING EXTRA TO BE IN THE RESEARCH STUDY?

Participating in this study will not cost you anything other than time and effort. Your insurance will not be billed for any testing associated with this study.

WILL YOU BE PAID TO BE IN THIS RESEARCH STUDY?

You will be reimbursed for your time, effort and travel while you are in this research study.

You will receive payment for this study in the form of a reloadable debit card (Clincard). We will give you a handout that will explain how to use the card. Because you are being paid for your participation, CCHMC is required by the Internal Revenue Service (IRS) to collect and use your social security number (SSN) or taxpayer identification number (TIN) to track the amount of money that we pay. You will need to complete a Federal W-9 form for this income tax reporting. This form requires your Social Security number. This form will be given to the CCHMC business office. It will not be kept as part of your study chart. If you move, you will need to complete another W-9 with an updated address.

You will be paid a \$50 Clincard Mastercard ® at the first study visit, and a \$100 Clincard Mastercard® for completing the second study visit. Participants who sustain a clinically diagnosed concussion will also receive \$50 for each completed session following new concussion diagnosis.

WHAT HAPPENS IF YOU ARE INJURED FROM BEING IN THIS STUDY?

This research does not require that the participant maintains participation in their sport. The desire to participate in the sporting event is an independent, personal decision separate from the decision to enter into this study. During the course of this study, we expect that injuries consistent with the sport being played will occur, such as head injuries, sprains, fractures, and muscle injuries. Some of these injuries may be severe and have severe consequences. The choice to participate and accept the risk of the participation in the sport you have chosen is a choice made entirely by



you. Neither the study investigator (Dr. Myer) nor CCHMC will be responsible for the medical treatment of any sport related injuries. While the likelihood of an injury related to this research is small, if you believe that you have been injured as a result of this research you should contact Gregory Myer, PhD as soon as possible to discuss the concerns. Treatment for injuries is available at CCHMC. If you go to the Emergency Room or to another hospital or doctor it is important that you tell them that you are in a research study. If possible, you should give them a copy of this consent form.

CCHMC follows a policy of making all decisions about compensation for the medical treatment of physical injuries that happened during or were caused by research on an individual basis.

WHO DO YOU CALL IF YOU HAVE QUESTIONS OR PROBLEMS?

For questions, concerns, or complaints about this research study you can contact the study person listed on page 1 of this document.

If you would like to talk to someone that is not part of the research staff or if you have general questions about your research study rights or questions, concerns, or complaints about the research, you can call the CCHMC Institutional Review Board at 513-636-8039.

WHAT ELSE SHOULD YOU KNOW ABOUT THE RESEARCH?

If you are diagnosed with a concussion during participation in this study, your medical care will not be affected by your participation. While your insurance will not be billed for any testing associated with this study, any further care or treatment will be billed accordingly. By participating in this study you acknowledge that you are voluntarily wearing an experimental device and that the FDA has not approved the device for sale and, therefore, it is not available for purchase in the US.

This research does not require you to participate in a sport. If you do choose to participate in a sport during this study, you alone are responsible for following the rules, regulations, policies, procedures, and requirements relating to any sport or organization in which you participate, either as an individual or through your membership on a team. Similarly, you alone are responsible for complying with any contract that you may have with a sports team, league, association, or any other type of organization.

AUTHORIZATION FOR USE/DISCLOSURE OF HEALTH INFORMATION FOR RESEARCH

To be in this research study you must also give your permission (or authorization) to use and disclose (or share) your "protected health information" (called PHI for short).

What protected health information will be used and shared during this study? CCHMC will need to use and share your PHI as part of this study. This PHI will come from:



- Your CCHMC medical records
- Your research records

The types of information that will be used and shared from these records include:

- Laboratory test results, diagnosis, and medications
- Reports and notes from clinical and research observations
- Imaging (like CT scans, MRI scans, x-rays, etc.) studies and reports
- If applicable, information concerning HIV testing or the treatment of AIDS or AIDS-related conditions, drug or alcohol abuse, drug-related conditions, alcoholism, and/or psychiatric/psychological conditions (but not psychotherapy notes).

Who will share, receive and/or use your protected health information in this study?

- Staff at all the research study sites (including CCHMC)
- Personnel who provide services to you as part of this study
- Other individuals and organizations that need to use your PHI in connection with the research, including people at the sponsor and organizations that the sponsor may use to oversee or conduct the study.
- The members of the CCHMC Institutional Review Board and staff of the Office of Research Compliance and Regulatory Affairs.

How will you know that your PHI is not misused?

People that receive your PHI as part of the research are generally limited in how they can use your PHI. In addition, most people who receive your PHI are also required by federal privacy laws to protect your PHI. However, some people that may receive your PHI may not be required to protect it and may share the information with others without your permission, if permitted by the laws that apply to them.

Can you change your mind?

You may choose to withdraw your permission at any time. A withdrawal of your permission to use and share your PHI would also include a withdrawal from participation in the research study. If you wish to withdraw your permission to use and share PHI you need to notify the study doctor, listed on the first page of this document, in writing. Your request will be effective immediately and no new PHI about you will be used or shared. The only exceptions are (1) any use or sharing of PHI that has already occurred or was in process prior to you withdrawing your permission and (2) any use or sharing that is needed to maintain the integrity of the research.

Will this permission expire?

Your permission will expire at the end of the study. If the study involves the creation or maintenance of a research database repository, this authorization will not expire.

Will your other medical care be impacted?

By signing this document you are agree to participate in this research study and give permission to CCHMC to use and share your PHI for the purpose of this research study. If you refuse to sign this document you will not be able to participate in the study. However, your rights concerning treatment <u>not</u> related to this study, payment for services, enrollment in a health plan or eligibility of benefits will not be affected.



Approved: 7/6/2018 Do Not Use After: 3/19/2019

SIGNAT	URES
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The research team has discussed this study with you and answered all of your questions. Like any research, the researchers cannot predict exactly what will happen. Once you have had enough time to consider whether you should participate in this research you will document your consent by signature below.

You will receive a copy of this signed document for your records.

Printed Name of Research Participant	
Trinted Name of Resourch Fartisipant	
Signature of Research Participant	Date
Indicating Consent/Assent	
Signature of Legally Authorized	Date
Representative*	
\ <u></u>	
* If signed by a legally authorized representative must be provided	e, a description of such representative's authority
must be provided	
Signature of Individual Obtaining Consent	Date